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OBSERVATIONS

O N

Dr. *CADOGAN*'s  
DISSERTATION

ON THE

G O U T

AND ALL

CHRONIC DISEASES.

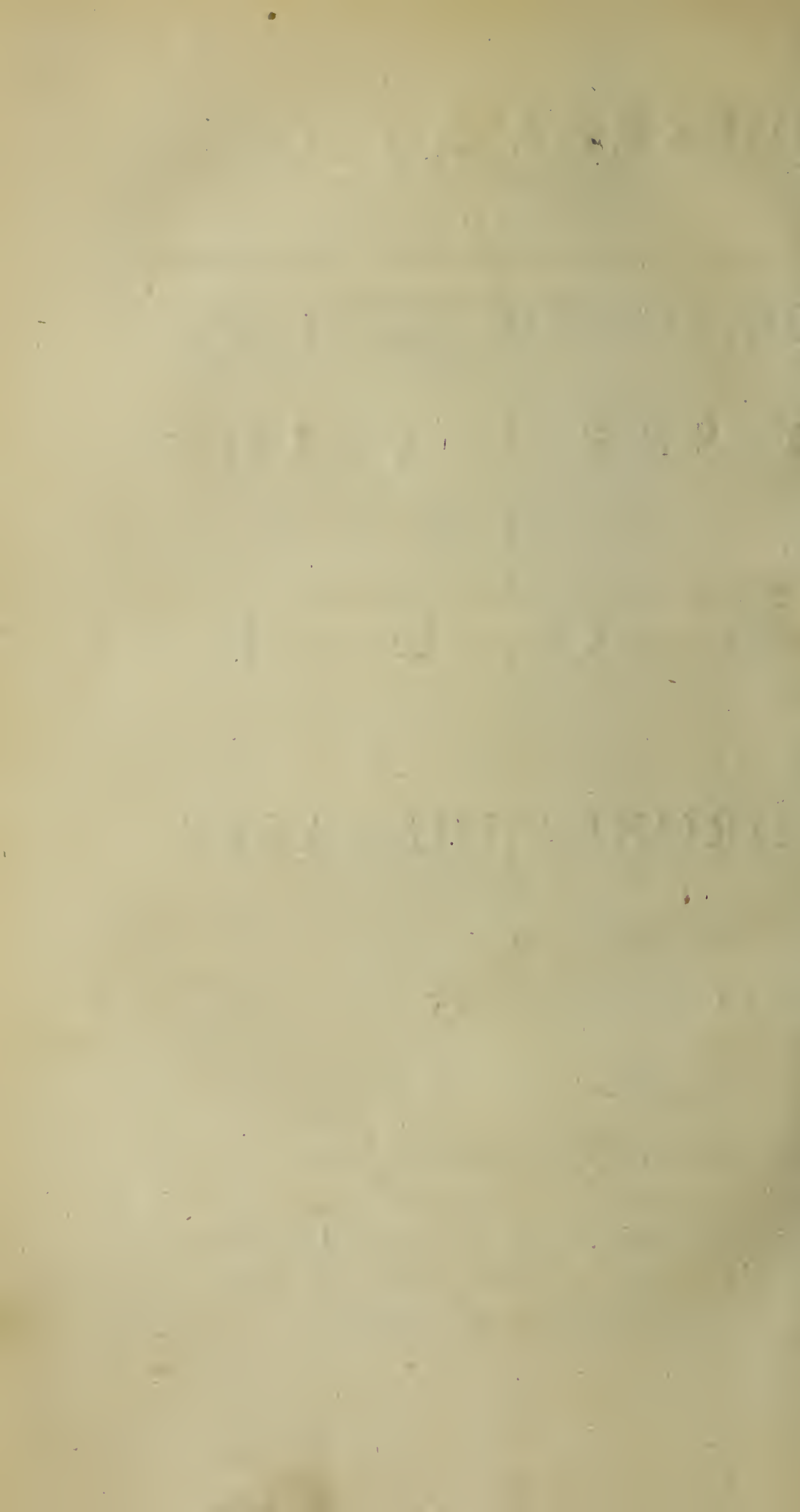
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P R E F A C E.

**T**HE Author of the following Treatise is fully conscious of the difficulty and hazard of attacking a work which has acquired so great a degree of estimation in the learned world as Dr. CADOGAN's Dissertation. The number of editions, thro' which it has in a short space passed, are undoubted evidences of the high opinion in which it has been held. Nor does the Author of the following sheets mean to insinuate that such reputation has been unjustly acquired. The causes of chronical disorders, (the gout particularly) and the means of cure, have  
been

been described and pointed out in a manner at once elegant and instructive. In this respect, the Author has certainly great merit, as he has, without debasing the subject, adapted his arguments to the level of common understandings, and happily avoided that pedantic style for which books of physic are but too remarkable. He is likewise possessed of a most elegant and persuasive manner of delivering his precepts and instructions, and has very properly endeavoured to ensure obedience to some of the *most important of them*, by arguments drawn from reason to prove that it is the interest of mankind to observe them.

It must likewise be acknowledged, that his general positions concerning the use of temperance, peace of mind, and exercise, to preserve health, which (tho' not new discoveries



ries in medicine) he has certainly great merit in enforcing with such spirit and energy, are undoubtedly just, and will remain unimpeached so long as physic continues to be practised on a rational footing. Yet I cannot help thinking, notwithstanding, that the book contains several very capital errors, and some of them likely to be of dangerous consequence to the health of mankind. To point these out in general is the intent of the following treatise, and those more particularly in which health is thought to be more immediately concerned.

THE Author hopes the ensuing observations will not be thought to be written with a captious intention, since they never would have appeared, if the work on which they were made had been written on a subject of less immediate importance to the public welfare.

HE

HE is fully conscious of its inferiority to Dr. Cadogan in many respects, yet nevertheless is in hopes that the importance of the subject will procure a candid hearing to his arguments, which, though he does not alledge to be conclusive, he cannot help thinking merit consideration.

IF the Author's sentiments concerning them are well founded, it will be a sufficient apology for their thus appearing in the world.



## O B S E R V A T I O N S

O N

Dr. CADOGAN'S Dissertation.

**T**HE first position laid down by the Author is, “ that mankind bring all chronical complaints upon themselves by their own indulgences, excesses, or mistaken habits of life, or by suffering their passions to lead them astray, or disturb their peace of mind,” &c.\* Were this position true of chronic diseases, I see no reason why it might not with equal propriety be extended to acute diseases likewise, since the latter may, with at least equal certainty, be traced to their origin, and depend as much on ourselves as the former.

\* P. 12.—Dr. CADOGAN on the Gout and other Chronic Diseases.



THUS I am inclined to believe, that the cause of a Fever may, with more certainty and more frequency, be traced to our own mismanagement or intemperance, than either the gout or stone, or indeed any chronic complaint whatsoever. But our Author seems to think, that the common notions which have been received concerning the causes of disorders are ill-founded,---“ that those commonly assigned, such as accidental colds,\* particularities of constitution, (by which I imagine he means Idiosyncrasies,) food disagreeing with or surfeiting the stomach, are causes too trifling to produce diseases that commonly last for life. He thinks that there must be something more permanent and constant in our daily habits, to produce such inveterate evils.”

THAT disorders have been often attributed wrongfully to these and other causes, to cover ignorance or excuse intemperance; is but too true; yet I cannot still allow them  
to

\* Vide page 12.



to be discarded from the number of causes that produce chronic disorders as well as acute ones.

Our judgment concerning the effect that any particular thing or circumstance will have upon our health is extremely limited, and varies so greatly at different times, according to the different states of the body, that it is almost impossible to decide satisfactorily upon it. Many causes which may appear to our judgment trivial and inefficacious, are capable of bringing about great changes in the human frame, which frequently continue after the original cause had ceased to act; and this is confirmed and accounted for by daily observation of the amazing effects of habit and custom. This is exemplified in numberless instances in medicine, but in none more remarkably than those complaints commonly called *nervous*, where we often see a paroxysm excited by some accidental cause, as a violent agitation of mind, &c. returning at certain intervals during

during life, though the exciting cause had long ceased\* and been never repeated.

SUDDEN cold is frequently the cause of paralytic and rheumatic disorders; the former of which ought certainly to be accounted a chronical complaint, and the latter very frequently becomes so.

PARTICULARITIES of constitution likewise (if I understand the Doctor right) sometimes lay the foundation of chronical disorders. I have heard from good authority of a person who had for many years an habitual periodic colic, which was brought on by eating a quantity of honey, to which he had a peculiar aversion. Whoever considers the nervous system (as it probably seems to be) as the great foundation both of health and disorder, its extreme delicacy, our ignorance of the manner in which it is connected with the rest of the system and of the manner in which

\* HOFFMAN relates numberless instances of epileptic fits, which had their origin from causes of this kind, continuing during life.

which it is affected, the substances which act upon it, and how these effects are varied in different subjects, and in the same subject at different times and in different circumstances, will, I trust, have no great difficulty in assenting to the truth of this observation. Thus we often see people escape unhurt from excesses, which we should expect would prove fatal to them, while on the other hand an indulgence, seemingly the most trifling, evidently lays the foundation of the most inveterate malady. This might be exemplified by a thousand instances that occur in daily observation.

I CANNOT, moreover, by any means agree with our Author in his opinion, “ that all our disorders of any kind whatever are *undoubtedly* owing to ourselves.”

I AM the more surprized that a man of the knowledge of Dr. Cadogan should make a peremptory assertion, contrary to medicine and philosophy, and what daily  
experience



experience contradicts. That the causes he assigns for disorders, viz. *intemperance, indolence, and vexation*, produce many disorders, and aggravate all, has been never doubted; but I am well satisfied that it is equally true, that diseases are incident to human nature, and that any medicine or mode of living, that should promise to keep us certainly free from disorder, would be as little to be confided in as one that was to promise immortality itself. Nor is this any reflection on our nature. Imperfection in health, body, and mind, is a characteristic of human nature. And surely it cannot be thought irrational to suppose, that as no means can prolong life beyond a certain period, that none can obviate the previous signs of its tendency to dissolution. Various methods of life are the causes of various disorders, but none has been as yet discovered that will effectually preserve us from any. Nations have varied greatly in their manner of living, yet it does not seem to have had in  
general



general any remarkable effect either in prolonging or abridging the date of their life : and though some instances are brought of great longevity and continued course of health, caused by a regular and temperate manner of life, we daily see examples where that has been rigorously complied with, and yet been found insufficient to procure it ; and instances of a contrary kind have been produced, where health and long life have been found to consist with the greatest excesses.

It is hoped, that what is here said will not be misinterpreted into an insinuation that our diet and manner of life are things indifferent to health.

THERE is no doubt that regularity and temperance are at least as rational means to pursue for the establishing or restoring our health, as industry and œconomy to our fortune ; yet no one can deny that even in the latter case they are sometimes both ineffectual.

THE

THE Author next passes from chronical diseases in general to a particular one, viz. *the Gout*, which he takes as a specimen\* of all the rest. I shall not dispute with the Doctor concerning its nature, but proceed to examine some of the positions he has laid down concerning it. These are in number three, and are as follow :†

1. It is not hereditary ;
2. It is not periodical ;
3. It is not incurable.

As to the first of these, if authorities were of any weight, almost every medical writer, from the days of Hippocrates to the present time, may be cited for a different opinion. A fact so directly in contradiction to the experience of former ages, would require very strong arguments to support it, or even excuse its being publicly asserted. Were it a mere matter of theory, the case would be different ; but as this is a thing which can be determined by observation only,

\* Page 16.

† Page 17.

only, I cannot help thinking some more caution would have been proper. But the Doctor's idea of its being hereditary seems to be a very extraordinary one. He says, "that if it were hereditary, no man whose father had it could possibly be free from it." But this is by no means the idea that has been affixed to the word by medical writers, who never pretended to understand by it a physical necessity, but only a great degree of moral probability. He indeed seems to allow, that the father's "having it inclines or predisposes the son to it;" but then he allows this "to be a predisposing cause only, which he says of itself never produced any effect at all." This is by much too subtle a division to hold universally. Causes which in some cases and circumstances are only predisponent, in others become both predisponent and occasional; and the very predisposing cause itself, when increased to a certain degree, becomes an occasional one likewise. But the Doctor says\*, "if it were hereditary it would appear in infancy and women,

\* Page 18.



women, which in general it does not." This by no means follows. The gout when in its natural state (if the expression may be allowed of) is not a disorder of infancy, or, in general, of the female sex. 'Tis sufficient to denominate it hereditary, if it is found that those males who have a parental claim to it are subject to it at a certain time of life. If the constitution of females and infants be not adapted to receive the disorder, 'tis as absurd to argue against its being hereditary because they are not affected by it, as it would be to assert that the disorder among the horned cattle was not contagious, because sheep and horses were not infected by it. On this account I cannot allow the Doctor's subsequent reasoning to be just, where he says, that " they who argue that the gout is hereditary, because they see it so sometimes, argue very inconclusively, since if we compute the number of children who have it not, and of women who have it not, together with all those active and temperate men who have it not, though born of gouty parents, the proportion will be found at



least an hundred to one." But if the case be stated as it ought to be, and an enquiry made whether those males that were born of gouty parents, and those especially which were begotten after their parents had begun to be affected with the gout, had it not themselves at a certain period of life, I suspect the computation would vary exceedingly. Different disorders make their appearance at different stages of life, and I am no more surprized at a young child's not being afflicted with the gout, than I am that a grown-up person does not suffer from breeding teeth.

HAD the ancient writers looked on this affair in the same light with Dr. Cadogan, they would scarcely have delivered it as their opinion, that the gout was an hereditary complaint ; and though the superiority of the moderns in some respects cannot be denied, the merit of accurate observation must be allowed to the ancients.

ARETÆUS and Cælius Aurelianus, who were most celebrated for judgment and accurate observation, both expressly affirm the gout to be hereditary; and numberless passages might be quoted from other ancient medical writers, to prove that they were of the same opinion. Nor indeed do the later of the modern writers, as far as I can find (Dr. Cadogan excepted) pretend to deny it. Sydenham, whose merit in observation is unparalleled, speaks of it expressly as inherited from gouty parents, and Boerhaave and Hoffman concur in the strongest terms in the same sentiment.

NOR is it an absurdity to call a disorder hereditary, altho' it should not appear in every branch of the family that we might suppose to have inherited it. It is sufficient, if it be generally present. Different constitutions and methods of life may alter the nature of the disorder, or entirely subdue it in them, though it may make its appearance in another generation. This is

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mentioned expressly by Boerhaave, where he says, speaking of the cause of the gout, “sequi solet---hæreditatem in feros nepotes, per parentem sæpe nondum podagricum, sed tantum labe genitali damnosum genitæ proli.”\*

To say that the gout is not hereditary, because it does not always descend to posterity, would be equally absurd, as to assert, that the succession to the crown of these realms was not hereditary, because its regularity had been sometimes interrupted. The scrophula and madness† the Doctor allows to be hereditary complaints, and such as (although chronical ones) we do not always bring upon ourselves. Yet he will scarce assert, that all the progeny of those affected in this manner, are either scrophulous or insane. The latter of these might be brought as an instance against a former argument of his, as that disorder, though often hereditary, seldom appears until a certain period of life. BUT

\* Boerhaave's Aphorisms.

† Page 19.

BUT what are we to understand by the other disorders which the Doctor allows to be hereditary, viz. “ diseases of taint or infection, and maleformation.” The only disorder that I know of the contagious kind, that we can safely say is communicated to posterity, is the venereal disease ; and this, it must be owned, frequently proves in this case incurable. Yet this does not seem owing to any peculiar virulence of the disorder, but to the debilitated state of the infant, which in general scarce lives a sufficient time for the medicines to work a cure. Where sufficient strength remained to master the other complaints, this has not been found incurable.

As to maleformation, I can understand by it nothing but misshapeness, and this I should least of any suppose to be an hereditary complaint. Children, it must be owned, often resemble their parents in their shape and make, as well as mind and disposition ; but this is scarce ever carried



to the length of a disease or deformity. Nor indeed can any reason be assigned, why a father with a hump back, or bandy legs, may not have children straight and well shaped. It must be owned, we sometimes see several children of the same family misshapen and deformed; and I hope this was more frequently to be met with in the last generation than it is likely to be in the present; but I believe, if this was to be examined, it would be found oftener owing to the mismanagement of those who had the care of them when young than any hereditary disposition. I am sure that in the present age, by prudent management, and most of all by not interfering with nature, the shape of mankind is in general improved greatly; and I doubt not that many of the bad shapes resembling one another, which we sometimes used to see in the same family, were owing to the same awkward means being used with each to improve them.

BUT

BUT the Doctor subjoins--\*“ If the gout be a disease of indigestion, and therefore of our own acquiring, we must reason very ill, or rather not reason at all, when we say it is hereditary; for, surely, no man will say that indigestion is hereditary, any more than intemperance.” Whether the gout be of this nature, or no, I shall not here enquire; but even granting it to be so, I really can by no means comprehend the force of this reasoning, or perceive any analogy in this case between intemperance and indigestion. The former is always owing to ourselves, the latter not so: But what reason can be assigned why an habitual weakness of the stomach, which is often owing to an over sensibility of the nerves of it, may not be inherited from a parent, as well as face, shape, or disposition? If we see, as we often do, a resemblance in the outward form and mental qualifications, is it absurd to suppose that the same analogy may hold concerning the quality and disposition of those parts which  
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\* Page 20.



are not in our power to examine? What makes this analogy more probable, is, that the nerves are the common agent in both these cases.--I do not mean to be understood to say that this resemblance always takes place throughout, in the disposition of the body to disorders, any more than it does in resemblance of person or mind : A man may inherit a feature of his face, disposition of mind, or disorder of the body, from his parents, and yet be very unlike in other respects ; all I meant to say was, that it did not appear absurd to suppose it possible.--But Dr. Cadogan objects “ that there are whole nations of active people, knowing no luxury, who for ages have been free from it, but have it now since the Europeans have brought them wine and spirits.”\* This fact is, I fear, but too true ; yet I still think it will be found no objection to the argument, that the gout may be hereditary.--Intemperance in our diet, and particularly, as Doctor Cadogan observes, the inordinate use

\* Page 20.



use of fermented liquors, will certainly produce the gout where it was not before, which may descend to their posterity, yet may still, in a course of generations, like other hereditary disorders, by proper methods of life and avoiding the causes which first produced it, be worn out and eradicated. To say that a disorder is hereditary, by no means implies that it is perpetual in the family, and never to be rooted out; this is not the case, as was before observed of the disorders which the Doctor himself allows to be hereditary, since if it was so, all mankind must by this time have been scrophulous or insane, and perhaps both, since, I fear, if any genealogy whatever should be traced backwards, we should find some of our ancestors who have some time or other laboured under one or both of these complaints, which, by that way of reasoning, must necessarily have infected all their posterity. Diseases appear, like other human things, to have their rise, progress, and decay,

cay, or perhaps, more properly speaking, change of nature ; nor are we always able to trace satisfactorily the cause of these variations. A few centuries ago the leprosy was almost, if not entirely, as common in Europe as the venereal disease is at present, and at that time was esteemed both hereditary and contagious ; at present it is rarely seen, and when it is met with does not appear to be either.

As to the next argument mentioned by the Doctor in favour of the gout's being hereditary, viz. *because it is incurable by medicine*, I can by no means admit of it. For even granting it to be incurable, I can see no necessary connection between that and its being hereditary. Were the History of Physic examined, I am inclined to believe, that cancerous complaints would be found at least equally incurable with the gout itself, yet they have never, as I know of, been esteemed hereditary, and are frequently owing to an accidental cause. It is e-

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qually probable, that disorders of our own acquisition may be as incurable as those we inherited from our forefathers, since no good reason can be given why their being hereditary should add to their virulence. On the whole, then, though I cannot help thinking, that what has been said pleads very strongly in favour of the gout's being sometimes hereditary, I would by no means be thought to insinuate that it is always so, as I doubt not, that it is at least as often brought upon ourselves. Intemperance, indolence, and vexation, which the Doctor has very properly enumerated as its causes will, beyond a doubt, produce it, *ab origine*, and in this case, as he very properly says, "we cannot excuse ourselves by throwing the fault on our parents, that our complaints may be more justly founded."----Perhaps, the truest account of any may be that given by Aretæus, who says of it, "*ex cujusve naturâ ac victus ratione contrahitur.*"



THE next point which the Doctor endeavours to prove is, “ that it is not periodical.”---If it were of use to quote authorities, almost every medical writer, from the institution of physic to the present time, has been of opinion, that the gout is periodical as well as hereditary, and I think great regard ought to be paid to them as to this point, since it must be determined principally, if not altogether by observation. “ *Podagricæ affectiones vere et autumnis ut plurimum moventur,*” are the words of Hippocrates, and nearly all succeeding writers have concurred in the same opinion. Sydenham, who deservedly gained a great part of the esteem in which he is held from his excellent account of this disease, expressly represents it as returning regularly in spring and autumn. He himself writes from thirty-four years experience, and I believe that those who have been subject to this disorder since his time, are but too well convinced, that he copied nature in his representation

presentation of it.---But I shall lay no stress on this, but proceed to examine the reasons that the Doctor gives for thus differing in opinion from so great authorities. He seems in the first place to think, that its being periodical is necessarily connected with the notion of its being hereditary. I own, I can see no necessary connection between these ideas, and, indeed, none of the other disorders, which he himself acknowledges to be hereditary, are of this kind. Nor is it necessary that (although periodical) it should be regularly so. The term, indeed, strictly taken, implies an unvarying regularity, but if taken in the same acceptation as it generally is in medical books, means no more, than that it is the nature and disposition of the disorder to return at certain intervals or periods; nor does any accidental interruption or variation render the use of it improper. Our returns of sleep and appetite may be properly termed periodical, yet these often vary without any disorder or  
apparent

apparent cause. 'Tis in this sense that the term must be understood of the intermittent fever, which our Author quotes as a model of periodical disorders. But, even this is not so invariable as he represents in the time of its return. Do not we often see a tertian depart of its own accord, or change into a quotidian or quartan, and this into a double or triple quartan, without any assignable reason? Cleghorn relates, that he often found the fit, as the patient's strength decayed, considerably anticipate the time it used to return.---Nor are the returns of the gouty paroxysms always owing to the causes which the Doctor assigns. An accidental circumstance, such as a blow on the limb which had been accustomed to be affected, sudden exposure to cold, and various other accidents, sometimes will instantly bring on a fit of the gout, long before the time it would naturally return, and which could not be attributed to what the Doctor calls accumulated indigestion, by which I apprehend, he means indigested,

or



or at least unassimilated matter, taken into the vessels and habit of the body.

THE last point that the Doctor contends for is, *that the Gout is not incurable*. This is a point which I shall not on many accounts dispute. To determine *à priori* that a disease is incurable, shuts out all further attempts, and, at the same time, argues great presumption. A late elegant writer of great medical knowledge has very properly recommended it to the profession, to make use of the word incurable, as applied to disorders, in no other sense than as such as they do not know how to cure; and I am apt to think that it ought to be understood in this sense in Dr. Warner's Essay, as he has, I believe, very clearly convinced the world, that the cure of the Gout does not come within the circle of his abilities. I entirely agree, then, with Dr. Cadogan in this position in general, yet I should be (as he is) very little disposed to believe, that this could  
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be effected by the sudden operation of any remedy, or that any medicine in nature can enable a man to practise intemperance with impunity. This assertion the Doctor has very properly treated with contempt and indignation, as it is no more to be expected that any thing can enable a man always to exceed the bounds of temperance, than those of justice or prudence, without sometimes suffering for it.

He has, likewise, very properly observed, "that the utmost that could be reasonably expected from medicine, would be to relieve and remove present disorders, without pretending to insure it from future injuries."-- I cannot, nevertheless, agree with the Doctor in his subsequent opinion, that "after a fit of the Gout is well over, that the man has no more gout or seeds of gout in him than he who never had it, and that if he did not again breed it, it would never return." ---Nor is it a proof of this that the gout has  
been

been sometimes cured by a milk diet, since that has scarce ever been found efficacious, unless entered upon early in life ; and when begun in a more advanced period, rather tended to aggravate than relieve the symptoms. Sydenham has observed that the gout is often prematurely brought on those who, after a continued habit of indulgence in the use of fermented liquors, afterwards changed them for those of a thin and cooling kind.

Tho' I agree with Dr. Cadogan in not thinking the gout incurable, I cannot agree with him in opinion, that it may be more easily and perfectly cured than almost any other chronic disease. In proof of this he alleges, " that the gout is a disease of the best constitution, relieving itself by throwing off harsh and bad humours from the vitals and out of the blood upon the extremities, where they do least harm to the powers and principles of life and health ; and as these humours can be no more than the daily accumulations



mulations of indigestion, if a man can live without breeding constantly this undigested acrimony, he may most undoubtedly live free, not only from the gout, but every other chronic disease also."

To reason on the nature of the gout, would exceed greatly the limits of a pamphlet of this kind. I shall only then observe, that the cause of the gout being seated in the acrimony of the humours of the body, is by no means so incontestible as the doctor seems to think.

THE opinions of physicians themselves have varied exceedingly concerning this, some attributing it to a saline, or tartarous acrimony; others to a bilious, and some have added to these a pituitous tenacity. But in fact, experiment does not seem to warrant any of these suppositions. The fluids of gouty people, in the intervals of the fit, and even just before its appearance, do not appear to differ sensibly from those in perfect

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health; and tho' some variation has been sometimes perceived during the paroxysm, it seems much more probably the consequence than the cause of the fit. Moreover causes will bring on a fit of the gout suddenly, which we cannot suppose to act in the least on our fluids, such as agitation of mind, or a slight blow, or strain of the part usually affected. Moreover the sudden transitions or metastases of the gout, from one part to another, are often much too quick to be imputed to a conveyance of the gouty matter, by means of the circulating fluids. Boerhaave seems aware of these objections, and has therefore referred the cause of the gout to the vitiated disposition of the nervous vessels, and the acrimony and tenacity of the nervous fluid itself. But this account by no means clears up the difficulty. For the very existence of a nervous fluid, we have nothing but probability, and till this is ascertained, we can scarce draw any satisfactory arguments from its quality or consistence. The gout is most probably a disease



ease of the solid parts, and of the nervous system more peculiarly ; but in what manner it is produced, or to what immediate causes it is owing, we are yet ignorant. But even granting it to be as Dr. Cadogan alleges, a disorder of the fluids, I see no reason why this might not be inherited from our parents as well as any other complaint. In short, it will be time enough to accuse *acrimony* of any kind, as the cause of the gout, or other chronic disorders, when it shall be proved to exist in such cases. No acrimony of our fluids has been yet discovered except that of the septic or putrefactive kind, which undoubtedly does not exist in this case ; and when it does, seems rather the consequence than the cause of the disease, as it does not take place until that is far advanced.-----Perhaps this word, when mentioned as the cause of disorder, might in general be referred to the list of those before mentioned by the doctor, which *satisfy, tho' they give no kind of idea.*



How far the doctor's promise in the subsequent paragraph, to point out a course of life which shall preserve us from the gout and all other chronic diseases, is likely to be depended on, I shall hereafter consider, when I come to treat of his method of cure.

THE next generally received opinion, which the doctor denies, is, " that any peculiar disorders are incident to any constitution and time of life." Nay, he even goes so far as to say, that there is no essential difference of constitution but of "*strong and weak*, and that this is produced more by art than nature." This opinion is so directly contradictory, not only to the received opinion of physicians, but to common sense, that it is wonderful that the ingenious author could so peremptorily assert it. Daily experience shews that the constitution, or what the ancients called temperament, is varied in different subjects, as well as the disposition of the mind. It seems now to be generally thought that the doctrine of  
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four temperaments of the ancients, was founded more on observation than any reference to the four cardinal qualities, to which they have been sometimes ascribed. The number might certainly be much enlarged, yet those divisions that are set down have a real foundation in nature. Thus a habit of body, attended with light and soft hair, a large system of arteries, marked out by a florid complexion, great sensibility, especially to the pleasurable passions, which the ancients denominated a sanguineous habit, differs essentially from one in which the hair was hard and curled, the arteries small in proportion to the veins, distinguished by a lividity of the skin, and in which the sensibility was less in degree, but more accurate, which the ancients denominated a melancholic habit. They may be both equally strong, yet differ greatly in the diseases to which they are liable; in the one, all disorders attendant on an increased sensibility, and large arterious systems: *e. g.* Those of the inflammatory kind, as fevers, consumptions,



sumptions, and arterious hæmorrhage; in the other, disorders arising from a contrary cause, as dropfy, liver complaints, obstructions of the alimentary canal, apoplexy and palsy, and venous hæmorrhage.

Do not we likewise commonly observe the make of the body indicate a tendency to certain disorders? Does not a long neck, narrow chest, and lean habit, shew a disposition to phthysical disorders? And does not a short neck, and corpulent habit, threaten apoplexy and palsy.

MOREOVER, the constitution and habit are greatly varied according to the time of life. In infancy the sanguineous habit prevails in its full force; in manhood the choleric, which seems to be an intermediate state between the sanguineous and melancholic, which last prevails in old age. This fact seems to argue strongly against our author's subsequent assertion, viz. that there are no disorders necessarily peculiar to any time



time of life. If the constitution varies, 'tis obvious that the disorders incident to it must do so likewise. But our author has guarded his expression by inserting the word *necessarily*, as if to imply that they were owing to ourselves. But I would alledge, that the instances on which this assertion is founded are too few to draw any general conclusion from them. The mode of life, likewise, with which longævity has been found compatible, has been so varied as to afford no certain indication. If longævity has been imputed in one instance to extraordinary abstinence, in another it has been found compatible with a more free method of living. I have been well informed that a late person in high station, after having made all possible enquiry concerning the methods by which life had been preserv'd to a great length, could, on the strictest examination, find one general circumstance only, which had been practised by all that had attained to a great age; which was that of *early rising*. But if (as Dr. Cadogan does not seem to doubt)

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our dissolution some time or other is inevitable, it need not seem wonderful, that the mortal fabrick should give some signs of its decay, before it falls to the ground.

I shall now proceed to examine what the Doctor has said concerning the causes which he has assigned for all chronic diseases:

The first of these is INDOLENCE.

THE first part of this chapter contains a very elegant and rational persuasive to the use of exercise, and such as I doubt not every man's experience must bear testimony to the truth of. But I imagine that the modern physiologists will scarcely be disposed to give him much credit for his account of the animal fluids. The doctrine of Boerhaave and Leuwenhoeck concerning the composition of the red globules is now entirely exploded, as is the notion that all the parts of the blood were convertible into one another. This has so little foundation, that the most  
common



common experiment proves that the three parts of the blood do not admit of any intimate union one with another. The serosity spontaneously separates, and, although the coagulable lymph and red globules seem to remain united, their combination is no more than a mere entanglement of the latter in the former. Nor do the best physiologists allow the fact of the red globules ever losing their colour. That this is made deeper by the accumulation of the red globules, is certainly true, but it is no less so, that when separate they have a red colour. This is plainly proved by the red tinge, which they in small quantity impart\* to a large one of water. Nor is the fact at all proved, that the separate particles composing our fluids, are all of a globular form. The separate particles composing the coagulable lymph and serosity, cannot be at all distinguished, notwithstanding what Leuwenhoeck has asserted ;

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\* Rubra pars per aquam diffusa plure etiam aquâ in infinitum fere diluta, dilutius quidem rubet, nunquam tamen flavescit uti nec recentis sanguinis guttula, millicuplo aquæ tepidæ permixtæ, in flavedinem deducitur, sed rubella manet.—Gaubius Pathol. Sect. 341.



serted; and, though something of this kind appears in the red part or cruor, it is probable, that they assume this form only when diffused in a fluid, with which they will not unite, as oil in water. But, even the form of these has been much disputed, and, though Haller alledges them to be spherdical, Senac says, they are lenticular. In truth, there is nothing sufficiently certain determined concerning them, from which we can draw any practical inferences.

NOR is the Doctor's Theory less liable to objection, which lays all nervous disorders to the charge of obstruction. He follows, in this respect, the Boerhaavian doctrine, which has been long given up, as contrary to experience. Van Swieten, the scholar and follower of Boerhaave, is obliged to give up his master's doctrine, concerning obstruction, in a great degree, and later Pathologists have fully proved, that it takes place much less frequently than has been generally imagined, and that, when it does occur,

occur, it is not productive of the disorders usually attributed to it. As to rough angular particles in our fluids, which Dr. Cadogan speaks of, we have not the least authority to believe their existence, as no experiment has ever rendered them visible. Nor is the closing up of the small vessels of the body one of the bad consequences that can be proved to result from an indolent habit of body. So far otherwise, that this circumstance, which is found to take place universally in some degree towards the decline of life, (in the lymphatic system particularly) has been most observed in those who have in their youth been accustomed to hard labour. Yet, this has been often found to occur, without inducing any of the bad consequences which our Author seems to apprehend from it. Nor is dyspnoea, or shortness of breath, which we so commonly see in fat people, owing so much to this cause, as to the pressure on the veins, occasioned by the fat distending the cellular membrane, which obstructs the return of

the blood to the heart, and of consequence detains it in the lungs. 'Tis for the same reason that we generally see corpulent people inclining to dropfical disorders, which are with great probability attributed to the same cause.

As to the remainder of this chapter, it is but just to acknowledge, that his reasoning concerning the use of exercise, seems extremely well founded.

I now proceed to remark on what Dr. Cadogan has said in his next chapter,

### Concerning INTemperance.

WHAT the Doctor has said in general concerning the bad effects of intemperance, is extremely proper, but I cannot so easily concur with him, when he comes to particulars. He says, very properly, in his description of intemperance, that "it is a deviation from that rule which is pointed out by and most agreeable to nature." He  
next



next observes, that “ temperance is a thing of which no Englishman has, or can have the least idea, if he judges from his own, or neighbour’s habits. To form some notion of it, he must have seen other countries, particularly Spain, Portugal, and Italy, and observed how men live there.” But in fact, no inference could be drawn relative to our climate, from any observations that could be deduced from thence ; and I would deny, that any such thing exists in nature, as what the Doctor calls natural temperance, not dependent on place or custom, and which would of consequence equally suit any or every situation, climate, or former manner of life. A manner of living that would be perfectly agreeable to nature in one climate, would be quite contrary in another. This is plainly pointed out by the different aliments supplied by nature in different climates, and from the different things that our appetites lead us to desire, which are undoubtedly an impulse of nature.

I do not mean this as an objection to Dr. Cadogan's subsequent definition of TEMPERANCE, which every one will allow to be just, but to his application of it to particulars. I am inclined to think, when he speaks of these, that he has been far from making sufficient allowance for difference of climate; and, on this account, I cannot by any means agree with him in his general prohibition of the common use of wine or fermented liquors. The admirable author of the spirit of laws has been aware of this, and has therefore with great propriety observed, that the laws of the Carthaginians and of Mahomet, to prohibit the drinking of wine, were laws suited to the climate of Arabia and Lybia, but remarks very justly, that such a law would be improper for cold countries, where the climate seems to force them as it were to a national ebriety very different from personal intemperance. "A German, says he, drinks by custom; a Spaniard, by choice."

THE general customs and manners of a nation ought to be considered as no inconsiderable guides to determine our judgment in this respect; and when universally prevalent, must be considered in a great measure to proceed from indications of nature. But the opinion of writers, the history of mankind, and daily experience, confirm, that fermented liquors taken moderately are not only safe, but even necessary, in these climates. In hot countries, where the constitution is endued with a great degree of sensibility, which renders it obvious to every stimulus that naturally produces inflammatory complaints, where the humours are tending to putrefaction from the heat, and of consequence require to be frequently renewed, *wine* would be highly improper on many accounts. The perspiration is so excessive, that the blood stands in constant need of a supply of its aqueous part. This can be only done by watery liquors, as fermented ones could not be taken in sufficient quantity without increasing the inflammatory

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tory diathesis by their stimulus, which it seems the intent of nature to counteract. This would soon cause the humours of the body to run into putrefaction, on account of the increased heat and the humours not being passed off by perspiration, which is always obstructed when the heat is above a certain pitch. But in cold climates, the constitution and disposition of the people vary greatly. Montesquieu has very properly observed its influence on the human body in a political light; and the same causes produce considerable effects in a medical one likewise. The body has little spontaneous tendency either to inflammation or putrefaction, and the nervous system seems rather to labour under a defect than an increased degree of sensibility. On this account nature requires that the food should be of a kind to counteract in some degree the effects of the climate. Accordingly, fermented liquors and animal food, as being more stimulant to the system, are proper to be used; and indeed, where animal food is used in  
large

large proportion, fermented liquors become in a great measure necessary to obviate in some degree the septic tendency of such a way of living. But I would trust most to the general practice of mankind; and if this be examined, we shall find no nation, or set of people whatever, that do not make use of fermented liquors, of some kind or other, in their diet :\* Even in the most northern parts, as Lapland and Greenland, a fermented liquor is prepared from milk, which they use daily with their food.

I cannot help thinking that this circumstance is a stronger argument in favour of the general use of fermented liquors, than any that are drawn from any abstract reasoning whatsoever.

THE next circumstance in our diet which the doctor finds fault with, is, the use of

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\* Perantiqua est, et universo orbi communis cupido. Nam etiam in ultimo orbis angulo Kamtschatka Russi in farina membranulisque caulis sphondylii maximi materiem detexerunt qua exoptatum delirium sibi conciliarent. *Halleri Elem. Phys.* vol. vi. p. 244.

the common condiments to our food, viz. salt, pepper, mustard, and vinegar. That excess in all or any of these, or their improper use, may have bad consequences on our health, is undoubtedly true; but I much doubt if their being liable to abuse ought to make us banish them from our tables altogether, as there is great reason to think that, when united with our food in a proper manner, they serve several important purposes in the animal œconomy. The practice of all nations almost universally agrees in the use of some condiment or other with their food, and that being the case with people who had not copied from one another, as having never had any intercourse, argues strongly their use to be founded on an instinct of nature, and not on mere custom only. In hot countries, where (from the great propensity of the humours of the body to putrefaction) the inhabitants live almost entirely on vegetable diet, some condiment of the acrid or aromatic kind is especially necessary to obviate the flatulence which vegetable



table food only is so apt to generate. According nature has furnished them with aromatic plants, which serve this purpose perfectly well, and which in all probability were placed there with that intention. 'Tis probably, indeed, a mistaken taste or luxury in us to use those of the hot pungent aromatic kind, in these northern countries, with animal food, where the use of a large proportion of flesh meat is allowable, and even necessary. Instead of them, Nature has given us certain acrid plants, which being less stimulant, may be used in greater proportion in our diet ; such as all of the siliquose tribe ; and 'tis found by experience that these kind of plants are the best correctors of the putrescency of animal food, as they cure the sea scurvy much sooner and more effectual than those of the insipid kind. Moreover, in order to the proper digestion of our food, it is necessary that in its passage through the body it be mixed with several of the humours of the body ; first the saliva, afterwards the gastric liquor, pancreatic juice, bile, and

lymph reflux from every part of the system. In order to emulge these liquors properly, some degree of stimulus on the secreting gland is required. But vegetables of the nutritious kind are almost all of them nearly insipid, and of consequence would do this very imperfectly, without some addition; and flesh meats, though they have more sapidity, when mixed with vegetables as they ought to be, have scarce sufficient stimulus without some poignant addition.

I imagine that they serve another purpose likewise. The peristaltic motion of the intestines, so necessary to the excretion of our food, is in all probability owing to the stimulus of the aliment passing through them. Some kinds of vegetable food, as being nearly insipid, have but little power in this way, except by their bulk; on which account those who eat a large proportion of the farinaceous seeds, as rice, barley, or wheat, are of a costive habit. In relieving this symptom,  
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condiments are found of especial service.\* Animal food, likewise, though its passage through the intestines be quicker, (probably on account of its being more sapid,) stands in need of condiment as well as vegetable food; since its progress to putrefaction is proportionably more rapid. In order to check this and promote its passage through the intestines, some additions of this kind are especially proper; and we find by experience that some plants of the acrid kind, which contain very little nourishment in themselves, are the best correctors of animal food. They likewise enable the stomach to take in and retain a sufficient quantity of food to nourish the body, as a flesh diet is found by experience to be apt to pall very quickly without some such addition. The general dislike of mankind to food that is insipid or nearly so, and the desire they express for some addition of this sort, argue very strongly that

\* Fresh fruit is generally laxative, but this is generally owing to its fermenting in the stomach. Condiments, as being antizeumic, take off this quality.



that it is founded in nature, and not owing to a depraved appetite.

So much for the use of condiments in general. Much more might be said, but the bulk of a book of this kind does not allow of much physiological reasoning. I shall now say a few words concerning the particular condiments which the Doctor mentions and objects to: The first of these is

SALT. This seems least liable to objection of any of the four mentioned, as when eat with fresh food it is not liable to be taken in quantity prejudicial to health, and is least liable to disgust or pall the stomach on repetition.\* It is not subject to be decomposed in the human body, and on that account is serviceable in stimulating the intestinal secretions as well as those of the mouth and stomach. Probably for this reason it is so much

\* Videtur omnino aliquid in Sale esse, quod naturæ animalī conveniat. Nam pene omnes gentes sale utuntur, & etiam bruta animalia pleraque, certe quæ ruminant, sale delectantur, et ab ejus non bene se habent. *Halleri Elem. Phys.* vol. 6.

much desired by ruminant animals, whose food seems to require a large afflux of liquor from the glandular secretions of their organs of digestion, in order to be properly assimilated, so that their fondness for it may be owing to a natural instinct ; and 'tis not improbable that our liking for it may be founded on a like cause.

PEPPER. This I fear, as we use it, is the most exceptionable of all those mentioned. It is the produce of a hot climate, and might there be very properly taken with vegetable food ; but here, as we make use of it with animal diet, 'tis undoubtedly superfluous, and probably prejudicial. Its proper use seems to be with vegetables only, as it is a substance of a stimulant inflammatory nature.

MUSTARD. This is a vegetable of our own growth, and most probably well suited to our use in these northern climates, where a large proportion of flesh meat is necessary.

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It is possessed of a considerably acrid stimulus without the heating and inflammatory properties of the southern splees, on which account it is found a powerful antiscorbutic. I am inclined to think that our use of it with some meats which are of a strong taste, little perspirability, and which run quickly into putrefaction, as pork, goose, &c. is not merely the effect of custom, but in a great degree dictated by nature. Its use in food is extremely ancient; Hippocrates mentions it in his treatise of diet, and Aretæus recommends it to be taken liberally in that way, in cases where other stimulants were forbidden; and is very lavish in his praises of it, for its good effects in expelling flatulence, and promoting digestion, qualities which are seldom found in vegetables, except combined with such a degree of stimulant quality as renders their frequent use improper. But our experience proves its innocence, when taken (as we do) with our food; and this is confirmed by numberless instances of persons who have taken medicinally



dicinally for a long time together, every day, ten times the quantity that is ever used with food, even by those who exceed most in it, and that with great advantage in some of the complaints which, from the Doctor's way of reasoning, we should imagine it most inclined to aggravate. I cannot, therefore, agree with the Doctor, in his banishment of this substance from our diet.

THE last of the substances commonly used in this way is

VINEGAR. The use of this in diet is of very early date, as well as the foregoing: Hippocrates mentions it as such, and it seems to have been more general in succeeding times, as it is said to have made a part of the allowance of the state to the Roman soldiers, as an article of diet, whose common drink on their military expeditions was this substance mixed with water. I allow that its use in this way was in a great degree medicinal, and that in large quantities

it is better suited to a hotter climate than our own. But when taken moderately, I cannot think its use in food, even here, improper\* or insalutary. It gives a grateful taste to several kinds of aliment that would otherwise be apt to pall, and gently stimulates the stomach, so as to excite appetite. It is moderately antiseptic, and probably by that quality obviates the putrefactive tendency of a flesh diet, and is in that way antiscorbutic. When in a perfect state, or nearly so, it is safer to use as an acid condiment, than any of the recent juices, as having already gone thro' the vinous fermentation. It can have no bad consequences in the blood vessels, as it is easily subdued by the assimilatory organs.

I HOPE that what is here said concerning condiments, as well as what was before said concerning spirituous liquors, will be understood only of their moderate use. I have no  
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\* Salubre omnino & condimenti genus est, & denique potus.  
*Halleri Elem. Phys. vol. 6. page 220.*

more intention than Dr. Cadogan to vindicate the absurd and intemperate use that is daily made of them in our food, where they are often preposterously joined together, and mixed with substances which were before only too stimulant. But I hope that there will be understood to be a wide difference between condemning (as I heartily do with Dr. Cadogan) their immoderate use and abuse, and allowing them in the proper proportion that condiments ought to be taken. But our late improvements in luxury seem to have made us forget this distinction, as the substances which ought to be used in quantity sufficient only to give a relish to our food, sometimes almost equal the bulk of the remainder of the dish.

PERHAPS the best manner of avoiding such excess, is to allow the moderate use of them in a proper manner; and there is no doubt that such a regulation would be much more likely to be complied with than a severe prohibition.



ON this account I cannot agree with the Doctor in his tremendous representation of the bad effects of a little sage and onion, with the addition of a few grains of salt, or even (tho' that is more exceptionable) of pepper, eat with a goose, a duck, or pig. Nor can I believe that the still milder substances used in the stuffing of veal, or the trifling quantity of vinegar taken in, when we eat caper sauce, or other pickles, to mutton or other flesh meats, can lay the foundation of the dreadful train of evils which the Doctor ascribes to them. Undoubtedly they may easily be exceeded in, and excess in them is prejudicial; but I speak here (as the Doctor means) of their use, by those whom he supposes to take them moderately.

I HAVE before declared my opinion concerning the use of the aromatic or stimulant spices, such as pepper, (the Cayan in particular as most stimulant) with flesh meats; but in this case the Doctor supposes  
luxury

luxury to have made but little advance ; and here I believe the quantity of pepper generally used is very small, and in one instance, (stuffing of meat) for the most part mixed with a large proportion of the safest of all vegetable food, viz. *bread*, which in some degree qualifies its stimulant quality. Nor can I agree with the Doctor, in thinking so harshly of pickles as he seems to do : They may, undoubtedly, like other things, be indulged in to excess, and thereby do harm ; but in the manner they are here supposed to be taken, I cannot apprehend such dreadful consequences.

MOST of the vegetables commonly used in pickles, are of the esculent kind, and generally (I mean those made at home, which are most used) nearly insipid ; but whether this be the case with the vegetable in its natural state or no, the vinegar quickly destroys the peculiar flavour, and I believe qualities ; so that, in short, the generality of pickles can be considered only as so many  
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porous spongy vegetable substances, containing vinegar. The vegetable part is not, indeed, so easy of solution as in its recent state; but as they are always eaten with animal food, and but in small quantity in proportion, little harm is to be feared on that account, as animal food promotes so much the solubility of all the vegetable food mixed with it.

THE Doctor's next observation, concerning the impropriety of the use of several kinds of food by sedentary people, is undoubtedly in general well founded; yet I am in doubt whether he has not extended his argument too far. Meat, preserved with salt, tho' in some respects exceptionable, is not so difficult of digestion as our author seems to imagine: Tho' of seemingly firm texture when compact, it is, when divided, easily soluble in the stomach, which is probably owing to its being free of that glutinous viscosity attendant on the flesh of young animals, which renders them so difficult of digestion.



digestion. I have heard from an eminent physician, that he had observed many valedudinarians, whose stomachs could not bear a piece of veal, lamb, or chicken, but which easily digested a slice of ham or dried beef.

THE next remark of the Doctor's is relative to the management or dressing of our food. He is of opinion, " that our meat is in general over-done ; if by boiling, he alleges that the juices are lost ; if over-roasted, fried, or broiled, it becomes rancid and acrimonious." This to be sure is sometimes the case ; and yet I cannot agree with Dr. Cadogan, in advising to eat flesh meat while its red juices are unchanged, except in some very peculiar circumstances. Meats little done are certainly easiest soluble, (which the Doctor lays great stress on, and is undoubtedly a circumstance of great importance) but they are, at the same time, exceedingly alkalescent, and run \* quickly into

\* Sir John Pringle has observed that raw meat ferments more violently than when roasted, and generates more air.

into putrefaction ; so that I much doubt whether they are to be chosen for those who eat a large proportion of animal food, as such diet would be apt to induce a habit of body highly scorbutic, or tending to putrefaction, except taken with a large proportion of vegetables. On this account I am apt to suspect that the French (who for a warm climate eat a large quantity of animal food) eat their meat so much roasted or boiled, from a kind of natural instinct, in order to obviate its septic tendency, which is much augmented by the greater heat of the climate. Nor are the instances, by which the Doctor would recommend this method of life, well chosen. As to cannibals, I believe their existence is very doubtful ; and though some nations are acknowledged to eat their food without any dressing by fire, it is for the most part previously dried, and deprived of the greatest part of its juices which soonest corrupt. As to beasts of prey, no analogy can be drawn from them to us in the least ; they are furnished with  
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short intestines, by which means their excretions are quick, and the food does not remain a sufficient time to acquire a great degree of putrefactive tendency. But this is not the case with man, whose intestines are of a middle length between the herbivorous and carnivorous animals, and consequently the food must make a longer stay, which points out the reason why its tendency to putrefaction should be moderated. Moreover the stomachs of all carnivorous animals are found to contain a strong acid, which probably serves as an antiseptic. Something of this kind is found in the stomachs of many animals, but in the carnivorous ones it is by much the most remarkable. Whether this is secreted from the glands, as a provision of nature to obviate the bad effects of the food's putrefaction, or produced by the meat's undergoing an acid fermentation, is not clear. Dr. Pringle has proved that animal substances, contrary to what has been imagined, promote, rather than prevent the acetous fermentation, and



'tis likely that in this it does not go on so rapidly to the poutrefactive fermentation, as it would do otherwise, on account of the air being excluded in a great measure. 'Tis observable that much less communication with the air is necessary to the acetous fermentation, than to either the vinous or putrefactive. Nor can I see any good reason for recommending meat broiled, as preferable to any other way of dressing, since the lean part is more scorched and dry on the outside than by any other of the common methods, and the fat rendered more empyreumatic, as being in immediate contact with the fire; not to mention the additional strong taste imparted to the whole by the steam of the oily parts which are burnt during the operation.

OUR Author then goes on to make some very pertinent remarks concerning the nature of our food in general, which he rightly observes ought to be of the mixed kind, viz. vegetable and animal, and has very properly  
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drawn his arguments in favour of this opinion in a great measure from the “ desire and longing which those who have been confined to either of these kinds of food have for things of the other sort, as well as pleasing sensation when they are taken, which, as he says very justly, plainly indicate a natural want.” It were to be wished that our Author had duly considered this circumstance in some other parts of his work, as he would then have been more cautious in referring the general manner of life of whole nations to a depraved appetite which was more probably an instinct of nature.

He next proceeds to declare his opinion concerning the cause of chronic diseases, which he lays to the charge of acid crudity in our fluids, producing coagulations, concretions, and obstructions of various kinds, which, he says, are very manifest in the gout, rheumatism, stone, and most nervous cases.

I BELIEVE that it would be very difficult to prove that the above-mentioned disorders owe their origin to acidity in the juices, which the Doctor so confidently assigns as their cause, or indeed to prove that such a cause ever existed at all. Experiment rather shews the contrary, since neither the blood or any of the secreted juices shew signs of any such quality on the strictest examination. All reasoning then of this kind must be frivolous until the existence of this be ascertained.

It must, indeed, be owned, that an acid, as was before observed, is found in the stomachs of many animals, and among the rest, of men. But this, except carried to an excess in quantity or quality, is not a disorder, but a necessary step towards the assimilation of our food. It was formerly thought that only vegetable substances were capable of the vinous and acetous fermentation, and that animal substances went directly into the putrefactive, without going through the two foregoing; but Sir John Pringle



Pringle has very plainly proved that animal food, as well as vegetable, is capable of the vinous \* and acetous fermentation, and has brought many satisfactory argumenas to make us think that both of these always take place in the human body, previous to the digestion of our aliment. In an healthy subject, the stay it makes in the stomach is too short to admit of the acetous fermentation going to any great length, and moreover the saliva, \* as appears by experiment, and probably some of the other † in-quiline juices likewise, have a power of moderating both this and the vinous fermentation, preventing in the first the tumultuous generation of air, and in the second, the high degree of acid to which it would otherwise be carried.

BUT

\* Sir John Pringle's Exp. Pap. IV. Exp. XXX.

† Ne vero in plenum acorem cibi degenerent, impedit calor ipse putrescibilis, vis adfusi liquidi gastrici, deglutitæ ad fermentationem in horâ salivæ, potus alcaliscentium, bilis certe frequentissime in ventriculum redeuntis.

*Haller Primæ Linæ Physiologiæ § DCXLIX.*

BUT when from a weakness of the fibres of the stomach its peristaltic motion is slow and weak, and of consequence the food makes too long a stay there, or from want of mastication, or defect in the secretory organs these juices are not poured forth in sufficient quantity, or have their quality impaired, the fermentation is increased to a noxious degree. But though acidity is often productive of troublesome effects in itself, it is rather to be considered as the consequence, than the cause of the disorder. Undoubtedly in persons subject to acidity at the stomach, substances in themselves acescent, or likely to become so from their quality or viscid consistence rendering them difficult and slow of digestion, are not proper; but in many cases simple acescent substances are very wholesome and even necessary. In warm climates or seasons, acescent substances are highly calculated, by their cooling and antiseptic qualities, to prevent inflammation and moderate the tendency of the humours to putrefaction. In chronical diseases likewise of the putrefactive kind,

kind, these substances are found of great service by their antiseptic property, on which account sugar and infusion of malt were recommended in the sea scurvy by Dr. Cullen, of Edinburgh, and Mr. M'Bride \*. The former of these substances has been found to furnish a remarkably wholesome and nutritive aliment in our West-India islands; and Mr. Cleghorn has remarked, that in Minorca the observation of Galen is confirmed concerning the healthiness of those who are set to watch the vineyards, and feed on grapes, figs, and bread, (all acescent substances) although at that time of the year epidemic complaints are most frequent and dangerous. Experience likewise tells us, that all fruit may be more safely eaten, as it contains more sugar. Moreover the boiling, to which most of the preserved sweets (to which the Doctor seems to allude) have been subjected, previous to our use of them, takes off in a great degree their fermentative quality. 'Tis the opinion of many great physicians of the present age, that the common

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\* Vide M'Bride's Essays.



use of sugar has been one of the great causes why putrid and epidemic disorders are less frequent than they were formerly. It may then, I think, be fairly laid down, that acescent substances, moderately taken, are so far from being in themselves noxious, that they are probably absolutely necessary to correct the putrid disposition of the fluids. Nay even Dr. Cadogan, a little before, allows of their use, when he recommends vegetable food to be taken with animal, and afterwards where he advises fresh fruits, both of which are much more acescent than the substances which he here finds fault with for that quality.

BUT, in my opinion, the most dangerous error, into which he has fallen, is in what he has said concerning the unwholesomeness of bread.

THE use of bread, of some kind or other, is as ancient as the history of mankind. It is likewise so universal, that without some  
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form of this kind no nations seem to live. Even in Lapland, where no corn grows, they make a kind of bread of their dried fishes, and of the inner bark of the pine, which seems to be made use of, not so much for the sake of the nourishment it affords, as the supplying a dry food. This universal desire of mankind is undoubtedly owing to a natural instinct. The preparation of our food depends on the accurate mixture of the animal fluids in every stage. Among others the saliva is necessary, which requires dry food as a necessary stimulus to draw it forth, as fluid aliments make too short a stay in the mouth to cause a sufficient degree of manducation to emulge that liquor, and mix it intimately with our aliment. On this account we use bread with our animal food, which would otherwise be too quickly swallowed. For blending the oil and water of our food, nothing is so fit as bread, assisted by previous manducation. For this purpose bread is necessary in the stomach, as 'tis proper that a substance of solid consistence

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should

should be long retained there. Moreover 'tis necessary that the other animal fluids be mixed with our aliments in order to correct their acescency and hasten their assimilation. But liquid substances would not answer this end, whereas the solid stimulates and emulges the glands of the stomach.

For this purpose then bread is admirably adapted, being bulky without too much solidity, and firm without difficulty of solution. So much for the form of bread. But the Doctor objects to its acescency, which it must be owned it in some degree possesses. But this quality of it is neither so potent or so likely to become noxious as in other vegetable substances, since it has already passed in a great measure through the vinous fermentation in which the generation of air, the common cause of flatulence, takes place. By its acetous tendency it likewise moderates the vinous fermentation of other substances, and is in that respect an antizeumic. When it has been over-fermented it proves purgative,



tive, and this and the foregoing circumstance determine the proper degree of fermentation, viz. that it should not be so much as to have this effect, but sufficient to check the \* noxious vinous fermentation. As to the experiment which the Doctor adduces, concerning the acedcent disposition of bread, I cannot think it in the least applicable to prove its unwholesomeness. Undoubtedly when the acetous fermentation is carried to too great a length it becomes noxious as well as the vinous. But nature has provided against this by several methods.

THE juices of the stomach, before-mentioned, moderate this tendency; and moreover we find by experience, that as our food acquires this quality, it becomes in a degree purgative, and is passed into the intestines,

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where

\* Sir John Pringle has mentioned in his Experiments, that bread and water only were found not to be capable of the vinous fermentation, as they generated no air; and when mixed with animal substances determined powerfully to the acetous.

where it meets with the bile which corrects its acid disposition: nor is the stay of the food in a healthy stomach sufficiently long for it to acquire that quality in the degree he mentions. Moreover a communication with the air is necessary, which is not the case in the human body, as it appears to be in the experiment he relates; and as the circumstances are by no means parallel, no inference can be deduced from it. If the opinion of physicians in general is of any weight, it is the safest of all vegetable aliment, and the best corrector of animal food. Many weak stomachs, that can bear no other vegetable substance, find no inconvenience from this, and it is in all probability owing to their large use of bread that the French, who live in a warm climate, are enabled to take so large a proportion of animal food without inducing putrid disorders. Galen mentions bread, moderately baked and well fermented, as the most easy substance of digestion; and moreover adds, that without the latter of these, which the Doctor seems to think a pernicious

pernicious quality, it is not proper to be used by any one \*.

I SHALL conclude what I have to say on the wholesomeness of bread in general, with the words of Hoffman :

“ Panis inter reliqua alimenta principem  
 “ locum tenet, nec facile eo sine sanitatis  
 “ detrimento carere possumus. Ejus usus  
 “ omni tempore, ætati omni ac tempera-  
 “ mento accommodatus est, ideoque rectè  
 “ universale alimentum vocari potest, neque  
 “ carnes et alia, sine pane, facile assumi pos-  
 “ sunt, quippè quæ sibi relicta nauseam  
 “ creant †.”

NOR is wine so general a cause of accef-  
 cency as the Doctor represents : on the con-  
 trary it is found, when moderately taken, to  
 correct this quality of vegetable as well as  
 the

\* De Alimentis, Lib. I.

† Hoffman, Tom. I. De salubritate et insalubritate escu-  
 lentorum.



the putrescency of animal food, and this property is observed of the thin light wines, which being weakest are most subject to the acetous fermentation as well as of those which contain more alcohol, and are consequently stronger.

WHEN taken improperly, or in too large quantity, they weaken the stomach and organs of digestion, and by that means may be detained so long as to run into the acetous fermentation. But even here their effects in general as acescents are seldom very hurtful; since having already gone through the vinous fermentation, they generate no air. This observation is not applicable to some wines (the sweet ones in particular) which have their fermentation interrupted, and of consequence contain a quantity of fresh must, which has that fermentation to undergo, and which may produce all the bad effects in the stomach of the vinous fermentation. On this account the French wines are preferred to the Spanish, as being  
more

more perfect and uniform though they contain less alcohol.

I CANNOT also agree with Dr. Cadogan in the next maxim he lays down, viz. " that it is safer to drink a bottle of wine at a time, once a week, than a little every day." Nor do I think the publication of such an opinion is likely to be of service to the cause of temperance. What the Doctor says concerning the impropriety of the habitual use of stimulants, and of their effects wearing out by custom, is extremely true ; yet, in my opinion, not applicable to the present case, since I look upon wine, taken moderately, to be most necessary as an antiseptic, to qualify the putrefactive tendency, which the large quantity of animal food that we take in, would be apt to induce. So far I will nevertheless agree with the Doctor, that it would be safer and more eligible for a man to exceed now and then in this respect living moderately in the intervals, than to get into a daily custom

custom of any excess, however slight in appearance. But I look upon this to be very different from a prohibition of wine, or spirituous liquors, altogether. In short, the direction of Celsus, in this respect, is probably the best, who says: “*Sanus homo nullis obligare se legibus debet---nullum cibi genus fugere quo populus utatur interdum in convictu esse, interdum ab eo se retrahere---modo plus justo interdum non amplius assumere.*”

I HAVE nothing further to observe on the remaining part of this chapter, as it contains nothing immediately applicable to practice, except some directions concerning the choice of our wines, in which I entirely agree with him, that the weaker and lighter wines are much preferable, on many accounts, for us, who, being in a cold climate, are likely to use them more freely, to the stronger and more heady kinds.

IN



IN the former part of the subsequent chapter, our Author has given a very pathetic and just description of the bad consequences which grief and vexation bring on our health, to the truth of most of which every one who has been so unfortunate as to have had any experience of this kind, will readily testify. He concludes it with a kind of recapitulation of what he has before said in the former part of his work, and so far I am ready to acknowledge, that although I cannot agree with him in every particular point, I heartily concur with him in his general position, that no artificial medicines, or applications whatsoever, can be, in any degree, so efficacious to preserve our health, as activity, temperance, and peace of mind.

THE Doctor having finished what he had to say concerning the preliminary points, comes at length to the most essential part, viz. "his method of cure of the gout, and all  
K other

“ other chronic diseases, and the repair of  
 “ a broken constitution \*.”

BUT as his arguments are adapted almost entirely to the gout, which he before had said he proposed to take as a general instance, I shall leave the consideration of the rest until the Doctor shall think fit to treat more particularly concerning them.

THE first practical observation which the Doctor makes, is concerning the absurdity of the attempt to cure the gout by medicine; it being, as he alledges, “ at the time when such trial must be made, a disease that has no existence.” This is deduced from his former position, that the gout is no inherent disorder, but produced, from time to time, by our own mismanagement. But I am much inclined to think, that the Doctor’s arguments are not sufficiently numerous, or convincing, to render all attempts to cure the gout, in themselves, ridiculous.

If it be a disorder depending on a fault in the digestive organs ; or owing to any irritating substances, accumulated or secreted, and thrown upon the parts, commonly called *gouty matter* ; or if (what seems more probable) that it be a disorder of the nerves, and that its returns are owing, in a great measure, if not altogether, to custom and habit, it will not surely be thought absurd to give medicines with an intent to strengthen the first of these, to evacuate or correct the offending matter in the second case, or, in the last instance, to interrupt or break into the course of the paroxysms ; and all this, at a time when the disorder itself was not present. Is not the bark, and other medicines, properly given, to cure, or, which is the same thing, prevent the return of an intermittent fever, at a time when we could only from experience, and not from any deduction of reason, know that it would return at all, any more than we can a fit of the gout. In these intervals there is often no more signs of any disorder being formed, than



in a gouty complaint. Since the late discoveries in inoculation, it has been undoubtedly proved, that mercurial medicines, taken previous to the infection, will abate the virulence of the small pox; which the Doctor will scarce alledge to have had any existence prior to the taking the medicine: But in reality the absurdity lies in the terms only; and if the words *prevent*, or *mitigate the effects of*, had been substituted for *cure*, a future disease, no absurd interpretation would probably have been affixed by any one. I am nevertheless not much more inclined, than Dr. Cadogan, to pay much credit to the promises of any one who should engage to cure the gout by the operation of any medicine. The disorder, in general, seems to be too deeply interwoven into the constitution, to be thus suddenly eradicated; and all the attempts, hitherto made, having proved rather detrimental than serviceable, ought to put us on our guard very much, and teach us to suspect all who come with such professions.

AN entire milk diet is the only thing that has been found efficacious in preventing the fits of the gout, without inducing a worse complaint; and even this has done more mischief than service, except begun on early in life, and rigorously adhered to through the course of it. The Portland powder, as Dr. Cadogan observes, certainly prevented the return of the paroxysms, but never failed, at the same time, of putting an end, in a few years, to the life of all those who made a trial of it.

NEVERTHELESS, though its bad effects are unquestionable, I much doubt if they are explicable on the foundation which the Doctor assigns for them. He alledges, “ that its effect was to keep up a constant fever, which, by its own bad consequences, and preventing the gouty matter from fixing, proved the destruction of those who took it \* ”

BUT

BUT this is all theoretical, and by no means agreeable to the account we have of its effects from accurate observers. No symptoms of a constant fever were observed among those who used it; but, on the contrary, they were found to enjoy a remarkably good share of health, and at last almost all died, not of a fever, nor of any consequences that could be deduced from thence, but suddenly, of an apoplexy or palsy\*.

It must, be acknowledged, that Cælius Aurelianus mentions, that some of those who took this medicine died pleuritic †, or peripneumonic, as well as apoplectic; but it is possible that the effects of the medicine might be different in a warm climate, since no such were here observed from it. Moreover, we do not exactly know the composition

\* Some are said to have died of a hydrops pectoris, occasioned probably by the medicine, (vide Van Swieten, p. 365. vol. IV.) and the same effect seems hinted at by Coelius Aurelianus. Lib. V. c. II.

† Coel. Aur. lib. V. cap. II.



tion of the medicine referred to by Cœlius Aurelianus. From the name *Dia Centaurion*, from its effects, and our knowledge that such medicines were, at that time, in vogue for the gout, we may, with great certainty, conclude that it was of this kind \* ; but we know not, as the compositions varied, whether some of them might not contain some other heating ingredients, to which these effects might, with more probability, be attributed.

Nor have other remedies, as the Doctor observes, proved more successful.

#### ANTIMONIAL

- \* The Portland powder is composed of
- |  |                    |
|--|--------------------|
| Birthwort— <i>Aristolochia rotunda</i> | } root.            |
| Gentian — — —                          |                    |
| Germander,                             | } tops and leaves. |
| Ground Pine,                           |                    |
| Centaury,                              |                    |

Take of these dried, powdered, and sifted, equal parts.  
Dose, one drachm every morning for three months; three-fourths of a drachm for three months longer; and one-half of a drachm for six months more.

The pulvis arthriticus amarus, of the Paris Pharmacopœia, is the same, only adding the rhapontic root.

ANTIMONIAL and mercurial preparations, so efficacious in many complaints, were here found rather injurious than beneficial, and several of the narcotic plants, from which so much was expected, and of which we had such pompous accounts, on trial were found of no service.

THOUGH I may differ from Dr. Cadogan in some particulars, I perfectly agree with him in this general maxim, that the relief, or cure of this disorder, ought to be attempted more by a regulation of the manner of life \*, than the administration of medicines; which, nevertheless, as he very properly remarks, may often be of considerable service in palliating the symptoms.

IN this general view, the remedies he recommends, viz. activity, temperance, and  
peace

\* Primum monendi sunt paedagogici ne ullo modo corpus medicamentis affligant, sed rectâ victus ratione et mediocri diligentia, articulorum dolores vitari posse sibi persuadeant—Crato.—Vide Hoffman, tom. 2. p. 345.

peace of mind, are undoubtedly the most efficacious, as well as obvious. But in this I am apt to think, that all practitioners, and, indeed, all the world, have been long agreed. It is only in particulars that they differ; and, in this respect, I, among the rest, beg leave to make a few remarks on the case which he describes, and his treatment of it. As to the case, we may judge, indeed, of it, so far as to allow, with him, that it is as bad a one as we need propose; but certainly it is not drawn up sufficiently full and accurate, to draw from thence any material or particular indications of cure. It is not even mentioned, whether the seat of the violent raging pain, which he seems so much to make it an indication to assuage, be in the extremities or no, though, from what follows, we may infer, though not certainly, that such is his meaning. Nothing at all is said of his habit of body, or former mode of life; circumstances very necessary to be considered in the direction of medicines. I allow, with him, indeed, that if the point

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be



be to abate the pain in the extremities, the method he has advised, is very likely to have this effect \* ; but I am very doubtful if, in these circumstances, it can be a proper indication. Sydenham, whose authority ought to be of great weight, as having had so much experience of the disorder, and likewise of the bad effects of this practice, expressly † condemns the use of purgatives altogether. Some writers of eminence, it must be confessed, have, on the other hand, maintained

\* Observandum est enim quod purgatione currente, æger vel non omnino, vel remissè admodum, dolet. Sydenham de podagrâ.

† Ego certe persuasissimus sum a jugi et sæpe iteratâ experientiâ edoctus Catharsin omnem tum per lenientia tam per fortiora qualia pro more articulis expurgandis destinantur plurimum nocere; siue in paroxysmo ad minuendam materiam peccantem siue in fine ad dissipandas morbi reliquias siue in perfecta intermissione et recta valetudine ut venturo paroxysmo occurratur purgation in usum revocetur. Etenim tam mei ipsius quam aliorum periculo compertissimum habeo Catharsin quovis horum temporum administratam ita parum votis respondisse ut malum quod debuerat averruncare atque avertere, accerferet.—Sydenham, p. 447. De podagrâ.

tained the utility of cathartic medicines in this disorder. Cheyne advises them to be taken during the intervals, but expressly prohibits their use during the paroxysm. Hoffman, indeed, has recommended them at the beginning of the fit; but all concur in this, that their use ought to be confined to those cases wherein the *Vis Vitæ* is too strong, (as sometimes happens, when the subject is in the prime of life, and of a bilious temperament) but that they are universally injurious, and, even dangerous, where that is deficient, as contributing to weaken what ought to be the intention to preserve as much as possible. But, if I apprehend the present case rightly, there seems to be greater probability, that the patient would stand in need of cordial and stimulant, than antiphlogistic, or evacuating medicines. By the foregoing account, he appears to be in the decline of life, and probably his constitution much injured, and his strength impaired, which will not be unreasonable to suppose, (in a case confessedly bad) from

having undergone, at least, twenty paroxysms. That such an attempt would alleviate his pain, I have no doubt ; but Sydenham cautions, in the strongest terms, against trusting such a deceitful relief ; and, I acknowledge, that, in such a case, I should be so far from wishing to alleviate an acute fit of the gout in the extremities, that I should desire to encourage it, by proper means, as much as possible \*, and look upon it as the most fortunate circumstance that could happen. The best modern practitioners, I think, never go farther than to obviate a great degree of costiveness, (which sometimes happens from confinement during the paroxysm) by a gentle glyster, and very seldom use purgatives, taken internally, while the gout remains in the extremities ; and whenever such are necessary, subjoin an opiate according to Sydenham's direction, to  
prevent

\* Quanto enim magis ægri dolores lenit, tanto magis humorum concoctioni adversatur, quantoque claudicationem arcet, tanto materiæ morbificæ expulsiōni officit. Sydenham de podagra.



prevent the metastasis of the gout, from the extremities to the noble parts, so that any abatement of the pain, consequent on such exhibition, would be a circumstance of which they would be much more fearful, and jealous, than desirous.

I BEG leave to add here, what a writer of great reputation has said on this subject in general: “ Si omnia hæc considerentur, patebit, non tantum boni a purgantibus et emeticis expectari posse, ac quidam vulgò solet promitti, imprimis ab agyrtis. Certe paroxysmi tempore turbant totum corpus, si valida fuerint, et impediunt materiæ morbosæ depositionem ad loca debita, dum simul, liquidiora de corpore educendo, crassioribus relictis, nocere possunt.----Van Swieten. Comment. vol. IV. p. 349.

THE Doctor next recommends, to give, after the exhibition of the purgative, “ a few lenient absorbent \* correctors of acrimony,  
and

\* Page 83. Dr. Cadogan.

and even gentle anodynes." I imagine the former part of this advice to be founded on the theory, which he had before adopted, concerning an acid acrimony being the cause of the gout. This was the opinion of Hoffman, and of Boerhaave, in consequence of which, the latter, in order to overcome this tendency, advises the use of a course of alkaline lixivium \*. But he seems to have altered his opinion afterwards concerning their general use, since he restrains them to such cases as are not accompanied with bilious † symptoms. But, I believe, the present practice pays little regard to any indication of this kind, which is deduced only from theory, which does not appear to be well founded. Acidity at the stomach, and heart-burn, are very frequently troublesome symptoms, during a fit of the gout, but can by no means be said to be the cause of the disorder, since they are frequently present in  
other

\* Boerhaave's Aphorisms, § 1275.

† Elem: Chemiæ, tom. II. p. 59.

other complaints that bear not the least affinity to the gout, and may, with much greater probability, be considered as the consequence of a weakened state of the stomach, than the original cause of the disease. I do not, by this, mean to deny the utility of absorbent medicines to relieve the above-mentioned symptoms. I am well satisfied, that when they appear, that such are highly useful, and even necessary. But as these symptoms are not always present, and as the only use of absorbents in the gout, is in relieving them, I think that this cannot, with propriety, be esteemed a general indication.

THE latter part of this paragraph, where the Doctor recommends anodyne medicines, is of more consequence.

THE use of opiate medicines, in the gout, is undoubtedly very great in many instances. Sydenham recommends them, as the last refuge, in the most alarming circumstances, when the gout attacks the stomach ; and  
relates,



relates, that he himself was, by this means, recovered from the jaws of death, when all other applications had proved fruitless. He likewise advises their use, in cases where it was found necessary to administer cathartic medicines ; and says, that by giving an opiate, immediately after their operation, he has prevented the metastasis, and other bad effects, which so frequently occur, from the exhibition of laxatives, during the paroxysm.

IN cases likewise, where the pain is so intolerable as to overcome all patience, Van Swieten (though with some reluctance) allows the moderate use of opiates, in order to procure a respite from the pain, and gain some interval of rest for nature to recover. Opiates, likewise, seem to be allowed, by all practitioners, to be of great service in procuring rest in the night, at the decline of the paroxysm, when, although the pain be nearly gone, the natural sleep (probably from a habit of being so frequently interrupted)

interrupted) does not spontaneously return.

BUT, although they are undoubtedly of the greatest service, in the above-mentioned particularly, and probably in many other instances of this complaint, yet their use requires the utmost caution and attention, since, if improperly administered, they are capable of doing the greatest injury. On this account, it were to be wished, that the Author had been rather more explicit in his directions concerning so material an article. If it is to be understood to be taken in Sydenham's manner, immediately after the operation of the purgative, it seems extremely proper; but if he means it to be exhibited, merely to ease the pain, which seems more probably his intention, I cannot help thinking such a practice extremely dangerous, on many accounts.

A RELIEF of the pain in the extremities, (as I have before observed) seems, by no means,

means, an indication in the present instance ; and though this method would probably effect it, the most probable consequence of such abatement would be a metastasis of the gout, to the head or stomach.

HOFFMAN, very properly, cautions against trusting to such deceitful circumstance, which is the more dangerous from the transitory respite from pain, which it affords, which is so enticing, that it demands the greatest degree of resolution to lay it aside, after having once experienced its effects.

'Tis on this account that Van Swieten \*, with great judgment, recommends, when opiates may be necessary, to conceal, from the

\* Si autem intolerabilis dolor opiatorum usum poseat sic tegenda sunt illa remedia ut æger nesciat se illis uti ubi semel expertus fuit illud solamen, illo nunquam cardere vellet, etiam in motiori dolore.—Podagrici dum sævos dolores patiuntur sæpius eos sæpe redimere vellent vitæ etiam periculo unde Medici monita spernerent & proprio Marte opiata remedia sumerent quod non semel contigisse novi.—Van Swiet. comment. vol. 17. p. 283.



the knowledge of the patient, that any such medicine has been administered, lest he, from experience of the ease procured by it, might be tempted to use it too frequently. I knew an instance myself, of a person, who, from having once experienced a relief of this kind from opiate medicines, in a very severe paroxysm, could not sum up resolution sufficient to lay them aside when the pain became moderate, although he was fully convinced, that he injured his health greatly by such a practice. On this account, I fear that a late publication, by a reverend divine, has done infinite mischief, as he has advised, and encouraged, the use of opiates in so many instances; and, with so little precision, that every person, in pain from the gout, might easily adapt his case to his directions, and plead his authority, in order to deceive himself into the propriety of making use of so flattering, though treacherous remedy.

NOR is the next piece of advice, which the Doctor gives, concerning the use of cataplasms, or external applications, in order to abate the pain, less liable to objection. The Doctor, indeed, has guarded his expression, by inserting the word *proper*; but, I believe, the best practitioners are all agreed, that every external application, that has this effect, must be highly prejudicial. Sydenham, who professed to have had great personal experience in this way, declares altogether against the use of topical applications; and \* Hoffman, † Van Swieten, and indeed all the best modern practitioners, concur in opinion, that they are scarce ever serviceable, but frequently noxious, when applied to the pained part, at a time when the gout is in the extremities.

VAN SWIETEN § relates several instances of bad, and even mortal, consequences following

\* Sect. 2, cap. 11. vol. iv.

† P. 357, vol. iv.

§ Ibidem, p. 357.

lowing an alleviation of the gouty paroxysm, procured by these means, and remarks, of those who escaped with life, that their limbs were subject to become rigid \* much sooner than those of such people who had not been accustomed to use them.

I do not mean to assert, that an alleviation of the pain of a gouty paroxysm, is never an indication in physic; but I am apt to think, that incautious people may fall into a very dangerous error, in concluding from what is laid down in Dr. Cadogan's Dissertation, that to alleviate the pain, is oftener an indication, than it really is. I heartily wish, therefore, that the advice of Van Swieten was more attended to, where he says, "*Magnâ prudentiâ opus est ut tutó leniri possunt podagræ symptomata.*"

THE remainder of the paragraph, which contains his directions, principally concerning

\* P. 387, vol. iv. comment.



ing the manner of life proper to be followed during the fit, seems, in general, extremely reasonable; and he has, with great propriety, condemned a very common, tho' dangerous practice, of using a larger proportion of spirituous liquors, and other stimulant substances, during the time of the paroxysm, than they were before accustomed to, under a notion of preventing the metastasis of the gout to the vital parts; where, as he observes, when it rages in a distant part, it is not inclined to come.

BUT as these substances, when taken in too great quantity, after their stimulant operation is over, always leave the stomach in a weak and debilitated state, and impair the nervous system greatly, on the strength of which the continuance of the gout, in its proper situation, (the extremities) mostly depends; it is obvious, that such a practice, so far from being likely to answer the end proposed, would be the most likely thing possible

sible to invite it to the part where its presence was so much dreaded.

SYDENHAM's direction, with whom Dr. Cadogan seems to agree in this respect, appears the best. While the inflammatory diathesis lasted, he advised abstinence from wine and flesh meats; but as some stomachs, especially those who are in the decline of life, will not bear such a rigorous abstinence, he admitted the use of each, in small quantity, but with the greatest caution not to exceed in either, and to take no more than should be found necessary to support nature.

TOWARDS the decline of the fit, and if the patient be advanced in years, or much weakened, it should seem adviseable to allow, a more free use of substances of this kind, particularly fermented liquors; but, nevertheless, with the greatest care not to exceed the most moderate quantity to which he had been daily accustomed in health.

THE Doctor next proceeds to the most important part of his dissertation, viz. “ the prevention of the return of the gout, or its change into any other disorder, and to establish health.”

THE rational part of the faculty will, I believe, readily concur with the Doctor, in the first general maxim he lays down, viz. “ that the cure of the gout is not to be expected from a course of medicines, and that all the modes of practice, which have been employed for that purpose, which he enumerates, and are principally of the evaculatory kind, have been ineffectual;” and, I would add, most of them prejudicial.

HAVING laid down this position, he next goes on to describe the plan of life, which he would recommend in the instance above described, and which he promises shall be effectual for ever to prevent the return of his complaint, and so confirm his general health,



health, that it shall not again be overfet by every cold or trifling accident \*.

THE first and principal remedy, which he recommends, in order to accomplish fo great a change, is EXERCISE.

THE use of this, in the gout, has been ever acknowledged by all, and accordingly advised, in the strongest terms, by every writer since the institution of medicine ; and there are few of those, who are afflicted with the gout, so ignorant as not to be acquainted with this, without asking the advice of a physician. Friction, likewise, which the Doctor recommends, as a substitute for exercise when the patient is unable to bear motion, † Van Swieten advises it in the  
N strongest

\* Page 85.

† Frictiones autem insignem utilitatem habent, si applicentur partibus, quæ paroxysmi podagrici tempore dolere solent. Certus sum, pluribus experimentis, ingens levamen semper secutum fuisse, si impetrare potuerim, ut diligenter his uterentur ægrî mane & vesperi, imprimis in pedibus, quos frequentius morbus

strongest manner, and there can be no doubt of its utility.---The Doctor's subsequent advice, concerning exercise, and the manner of using it, is extremely good; and he has certainly shewn great judgment in being so precise in his directions, and laying so much stress on this circumstance, which many, from its simplicity and slow operation, would be apt to neglect. He has very strongly inculcated a most useful maxim to such people, not to be content with the strength they have already acquired by these means, but to employ it to get more, and never to rest satisfied with what is already gained; But although the Doctor lays so great stress on exercise, he allows that its good effects may be greatly promoted and assisted by medicines.

IT

*morbus aggreditur. Ne simplicitas remedii contemptum pareret, pannos laneos suffumigi quodam aromatico imbui jussi, vel et molle aliquod unguentum, adhibui: tamen, ut vera fatear, a sola frictione eundem effectum vide; si mane et vespere per quadrantem horæ quotidie adhiberetur.——Van Swieten comment. vol. iv. p. 374.*

IT were to be wished, that Dr. Cadogan had been more explicit in this respect, since his expression of \* “ mild antimonial absorbent, and saponaceous deobstruents, and sweetners,” give a very vague and uncertain idea.

ANTIMONIAL medicines I have before-mentioned to have been found unsuccessful in this disorder; and though some circumstances may perhaps require something of this kind, they are by no means a general indication, since, when taken long together, they injure the stomach very much, which is a circumstance of the most immediate concern. As to the other substances which the Doctor advises, I confess I do not understand what he means, sufficiently to make any remarks on the propriety of their use: But, to make amends for this obscurity, the Doctor, in the next paragraph, comes nearer to the level of common understandings, when he illustrates the propriety of the use

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of



of exercise and medicine, by a comparison drawn from cleaning bottles with shot or gravel, which, with agitation, will have that effect ; but without that, will do nothing.

BUT, what opinion must Dr. Cadogan have of the capacity of his readers, when he made the above comparison ? Is any person weak enough to believe, that the operation of medicines, on the human body, bears any analogy to cleaning a bottle with shot or gravel ; or that exercise promotes their effect in this way, in the same manner that agitation does in the other ? What proof have we that the human body requires any such scouring or cleaning ; or, if it did, that it could be brought about by an \* antimonial medicine,

\* The Vinum Antimonii, which, as Huxham observes, is capable of having every effect of any antimonial preparation, contains a portion of antimony inconceivably small.---An ounce of Crocus Metallorum, or Vitrum Antimonii, put into a hoghead of wine, will impart to it all an emetic quality ; and yet the antimony when taken out, will not be so sensibly diminished in weight, as to be discoverable by the nicest balance ;

cine, which does not amount to the thousandth part of a grain in weight. Such illustrations, however plausible to the vulgar, can scarce be seriously brought into argument. Were we to pursue the subject, we might add, that saponaceous substances must be here of especial service, since a little soap, added to the shot or gravel, must needs assist its operation in cleaning the bottle, in the instance just mentioned. I am far from meaning to deny the utility of exercise, in promoting the effect of medicines. but only object to this extraordinary illustration of their mode of action.

THE next material circumstance which the Doctor considers, is the proper food of the patient. This, he says, “ should be soft, mild, and spontaneously digesting, and in moderate quantity, so as to give the least possible labour to the stomach and bowels,  
that

lance ; and will afterwards impregnate any quantity of wine in the same manner. When taken as alterative, one dram or a small tea spoonful is a dose.

that it may neither turn sour nor bitter, nor rancid, nor any way degenerate from the qualities necessary to make good blood." These directions are undoubtedly good in general; but I fear some of the particular things he recites, as possessing these qualities, will scarcely answer to this character. Tripe, for instance, calves feet, chicken, are less soluble, in the stomach, than beef or mutton, which are of a more compact and firm texture. Dr. Robinson, of Dublin, has proved that food, of a seemingly firm texture, is of easier solution than that which is more loosely compacted, but which contains a more viscid juice. This is found in much larger quantity in the ligamentous, membranous, and tendinous parts, than in the muscular. This quality of difficult solution, is owing, in some measure, to the lesser degree of alcalescency, which the viscid parts of animals possess, which is the great promoter of the solubility of our food in the stomach. Perhaps, the difficulty of digestion of the flesh of young animals, is owing to the same cause,



cause, as they contain a much larger proportion of gelatinous matter, than the old; and are likewise much less alcalescent.\*

IF then the wholesomeness of our foods depends so much on its being in a perishable state, on which circumstance the Doctor lays so great stress, beef, mutton, or grown up fowls, would be more proper diet for a weak stomach, than tripe, calves feet, chicken, or any kind of the white fish he mentions, which are particularly remarkable for their viscid and glutinous quality. The observation of Dr. Robinson, cited in the note, shews, that this advice has a foundation in experience, as well as theory.

THE next material circumstance that he mentions, relative to our diet, is, his prohibition of wine. I have before declared my sentiments with regard to the propriety of

\* Dr. Robinson, of Dublin, observed of those who were subject to spit up their food, that this happened much more remarkably when the flesh of young animals was taken, than full grown meat.

of the use of wine in our diet, moderately taken ; and, in the instance before us, I am well satisfied that something of this kind must be especially necessary. Sydenham, who was a great advocate for abstinence from wine, in this disorder, particularly excepts cases similar to this, and declares, that such a change of diet has destroyed a great number of people. He himself experienced the bad effects of a sudden change of diet of this sort, which had nearly put an end to his life ; and I believe there are few modern practitioners who have not seen instances of the same kind. But Dr. Cadogan ventures to stake his life upon the safety of the experiment, even if the change was suddenly made ; and I verily believe, that there are few of those who have made the trial, who can personally contradict his assertion.

THE DOCTOR next proceeds to give some rules concerning diet, which are, indeed, principally a recapitulation of his former general maxims of moderation in our food,  
and

and the proper choice of it; to which I have before spoken. I cannot, nevertheless, omit to take notice of some particulars concerning the diet he recommends, particularly, where he says our food is more wholesome, the less liquid is taken with it. I confess I can see no reason for this maxim, or why the proportion of drink should not be measured by the thirst as well as the quantity of food by hunger. Moderation in both meat and drink is undoubtedly proper, but I believe that an excess in quantity of drink is generally thought less noxious than in solid food. To reason on the subject would much exceed the limits of this work; but to support what I have advanced, I beg leave to quote the words of a great Physiologist of the present age, who says, “ *Magis in cibo minus in potu peccatur cujus major portio possit quasi infundi quia ventriculo non retinetur.* --- *Et in univ[er]sum varia quidem in variis,*

O

potus



potus ad cibum ratio est\*, ut tamen potus constanter superet§.”

THE remainder of the directions, relative to the regulating our lives, contain nothing new or particular.---Moderation, in the quantity of our food, and a choice of such as easily digested, constant exercise, good hours, and the use of the pediluvium frequently, are the sum of it; and to the propriety of these, I believe every one will subscribe.

I HEARTILY wish I could say, with equal confidence with Dr. Cadogan, that these rules would be efficacious to the cure of chronic disorders, the gout especially; but I fear our illustrious countryman, Dr. Sydenham, will be found a notable instance, that the most judicious manner of life, and the greatest temperance, (though the best means in our hands) cannot insure us from the attacks of this

\* The mean computation of the proportion of drink to solid meat, seems to be nearly as five to two.

this obstinate and cruel disorder.----I must now take my leave of Dr. Cadogan, and hope I may be permitted to express the same sentiment with him in plea for what I have advanced, viz. “ that if I have hazarded any thing contrary to so great authority, it has been from a conviction of its truth.” For the freedoms I have taken, I hope I may be believed, when I declare, I mean nothing personal; and as to what I have said concerning his opinions relative to the subject, I beg leave to make my defence in the words of a distinguished moralist of the present age:—\* “ The faults of a writer of acknowledged excellence are more dangerous, because the influence of his example is more extensive; and the interest of learning requires that they should be discovered and stigmatized, before they have the sanction of antiquity conferred upon them, and become precedents of indisputable authority.”

\* Rambler, No. 93.

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